

IN THE CLAIMS

Claims 1-33 Cancelled

Subj C1

34. (New) A multi-tier system for digital radio communication, comprising:
a processor-based host adapted to control a remote unit;
a first-tier base station communicatively coupled to the host; and
a first second-tier base station communicatively coupled to the first-tier base station; and
a second second-tier base station wirelessly coupled to the first second-tier base station,
wherein the second second-tier base station is intermediate the first second-tier
base station and the remote unit, and wherein the first second-tier base station is
capable of communicating with the second second-tier base station without an
intervening first-tier base station,
wherein the host is adapted to control the remote unit through the first-tier base station,
the first second-tier base station, and the second second-tier base station.

35. (New) The system of claim 34, wherein the first second-tier base station is
adapted to go into a sleep mode for a preselected interval, wherein before entering the sleep
mode, the first second-tier base station transmits an indication representative of the duration of
the preselected interval to the remote unit.

36. (New) The system of claim 35, wherein the duration of the preselected interval is
defined by a start and end time of the preselected interval.

37. (New) The system of claim 34, wherein the second second-tier base station is adapted to:

buffer data intended for the remote unit;

transmit an indication at predetermined intervals to inform the remote unit of the presence of buffered data;

receive a request from the remote unit; and

provide the buffered data to the remote unit in response to receiving the request from the remote unit.

38. (New) The system of claim 34, wherein the remote unit comprises a data collection device.

39. (New) The system of claim 34, wherein the remote unit comprises a bar code reader or an RFID reader.

40. (New) The system of claim 34, wherein the remote unit comprises at least one of a vending machine, door locking mechanism, computer peripheral, thermostat, and pager.

41. (New) The system of claim 40, wherein the remote unit comprises a computer peripheral selected from the group comprising a printer, modem, handheld terminal, point of sale station, and other serial or parallel devices.

42. (New) The system of claim 34, wherein said first second-tier base station is wirelessly connected to the first-tier base station.

43. (New) The system of claim 34, wherein the first-tier base station is wirelessly connected to the local area network.

44. (New) The system of claim 34, wherein the first second-tier base station is connected to the first-tier base station through a serial port.

45. (New) The system of claim 34, further comprising a third second-tier base station intermediate the remote unit and the second second-tier base station, wherein the second second-tier base station communicates with the remote unit through the third second-tier base station.

46. (New) The system of claim 34, wherein the second second-tier base station communicates with the first-tier base station through the first second-tier base station.

47. (New) A multi-tier system for digital radio communication, comprising:
a processor-based host adapted to control a remote unit through a control signal;
a first-tier base station adapted to receive the control signal from the host; and
a first second-tier base station adapted to receive the control signal from the first-tier base station; and
a second second-tier base station wirelessly coupled to the first second-tier base station, wherein the second second-tier base station is intermediate the first second-tier

base station and the remote unit, and wherein the second second-tier base station is adapted to receive the control signal from the first second-tier base station and to provide the control signal to the remote unit.

48. (New) The system of claim 46, further comprising a third second-tier base station intermediate the second second-tier base station and the remote unit, wherein the second second-tier base station provides the control signal to the third second-tier base station, which then provides the control signal to the remote unit.